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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,262	09/26/2003	Karp-sik Youn	1349.1263	4945

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
JOHNSON, VICKY A	
ART UNIT	**PAPER NUMBER**
3682	

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/670,262	YOUN, KARP-SIK	
	Examiner	Art Unit	
	Vicky A. Johnson	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *20 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "an automatic tension adjusting part", but it is unclear how the spring automatically adjusts the tension to the belt when the sliding part, which supports the pulley, is fixed by the locking part and the anti-release portion. Once the components are installed the spring does not automatically adjust the tension on the belt, the spring imparts a constant tension to the belt.

Claim 16 is unclear, because there are no structural limitations in the claims with regard to the anti-release portion. Claim 15 only recites the functional limitation that the anti-release portion prevents the pulley fixing part from being released. The screw meets that limitation, but it is unclear what is meant by "a separate fixing part".

Claims 17 and 18 recite, "wherein the image forming apparatus is an inkjet printer", which renders scope of the claims unclear. Is a pulley fixing device being claimed or an inkjet printer being claimed? Claims 17 and 18 do not further limit the

pulley fixing apparatus they limit an inkjet printer. It appears to be a combination/subcombination problem and it is advised that the applicant cancel the claims and submit new claims in independent form claiming the combination of the pulley fixing apparatus and inkjet printer.

The terms "narrow" and "wide" in claim 9 is a relative term, which renders the claim indefinite. The term "narrow" and "wide" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The use of the term narrow and wide renders the guide hole indefinite because it is not known what degree the guide hole has to be wide or narrow in order to meet the limitations of the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8, 13-15, 19, 20, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Holbrook (4,969,859), as best understood.

Holbrook discloses a pulley fixing apparatus comprising: a pulley fixing part (45) rotatably fixing a driven pulley (51) on the frame (see Fig 4); a sliding part (13) movably supporting the pulley fixing part on the frame (see Fig 4); and an automatic tension

adjusting part including an elastic pulling spring (66) disposed between the pulley fixing part and the frame to elastically bias the pulley fixing part in a first direction and impart a predetermined tension to the power-transmitting belt (col. 2 lines 22-28), wherein the driven pulley is pushed from an inside of the belt when the spring is in tension (see Fig 1).

Re claim 2, a plate member (47) having a driven pulley support supporting the driven pulley and exposing a circumference surface of the driven pulley that contacts the power-transmitting belt (see Fig 1) to ease installation and removal of the power-transmitting belt.

Re claim 3, the sliding part (13) comprises a slide protrusion (35) positioned at the pulley fixing part; and the frame has a protrusion guide hole (62) positioned to receive and guide the slide protrusion (see Fig 1).

Re claim 4, the sliding part comprises first, second, third, and fourth slide protrusions positioned at the pulley fixing part (see Fig 1); and the frame has corresponding first, second, third, and fourth protrusion guide holes positioned to receive and guide the respective slide protrusions (see Fig 1).

Re claims 5-8, even though product-by-process claims are limited by and defined by the process, determination is based on the product itself. The patentability of a product does not depend on its method of production (i.e. installation and assembly). See MPEP 2113.

Re claim 13, the pulley fixing part comprises a first fixing portion (49); the frame comprises a second fixing portion (37); and the automatic tension adjusting part comprises an elastic spring having one end fixed at the first fixing portion and an other end fixed at the second fixing portion (see Fig 3).

Re claim 14, the first fixing portion comprises a first hook positioned at the one end of the elastic spring (see Fig 3), and a first fixing protrusion (49) to fix the first hook positioned at the pulley fixing part; and the second fixing portion comprises a second hook positioned at the other end of the elastic spring (see Fig 3), and a second fixing protrusion (37) to fix the second hook positioned at the frame to protrude through a penetrated hole positioned at the pulley fixing part.

Re claim 15, the automatic tension adjusting part further comprises: an anti-release portion (64) to prevent the pulley fixing part from being released from the frame by an external force of predetermined magnitude.

Re claim 19, a locking part (64, 48, unnumbered hole see Fig 1) to lock the pulley fixing part after the tension of the power-transmitting belt installed on the driven pulley is adjusted.

Re claim 20, the locking part comprises: an elongated adjusting-guide (48) with a long axis oriented at the pulley fixing part along the direction in which the pulley fixing part is elastically urged (see Fig 1); a threaded hole (see Fig 1) positioned at the frame to correspond to the elongated adjusting-guide hole; and a locking screw (64) engaging the threaded hole through the elongated adjusting-guide hole.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holbrook (4,969,859) in view of Burgoon (US 5,141,083).

Holbrook discloses a device as described above, but does not disclose an anti-push portion to prevent a fixing part from being pushed, having at least one projection/burr to protrude toward the fixing part.

Burgoon discloses an anti-push portion to prevent a fixing part from being pushed, having at least one projection/burr to protrude toward the fixing part.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Holbrook to include an anti-push portion as taught by Burgoon in order to prevent separation of the members (col. 3 lines 6-15).

Response to Arguments

Some further comments regarding the applicant's remarks are deemed appropriate.

The applicant states the "automatic tension adjusting part" imparts an elastic force, but does not explain how it is adjustable.

It is also argued that the structural limitations for the anti-release portion can be found in the specification, but does not explain about the ""the anti release portion does not include a separate fixing part", which is indefinite. It is unclear and not understood. The specification and the invention are understandable, but the claim is not.

The applicant argues that the "the image forming apparatus is an ink jet printer" further limits "the pulley fixing apparatus". The preamble of claim 1, for example, states "A pulley fixing apparatus for an image forming apparatus..." which is intended use, and therefore claims 17 and 18 do not further limit the pulley fixing apparatus.

The terms "narrow" and "wide" in claim 9 are relative terms, which renders the claim indefinite. The term "narrow" and "wide" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The use of the term narrow and wide renders the guide hole indefinite because it is not known what degree the guide hole has to be wide or narrow in order to meet the limitations of the claim.

The MPEP states that a requirement for restriction can be made at anytime before final action.

> *37 CFR 1.142. Requirement for restriction.*
> (a) If two or more independent and distinct inventions are claimed in a single application, the examiner in an Office action will require the applicant in the reply to that action to elect an invention to which the claims will be restricted, this official action being called a requirement for restriction (also known as a requirement for division). Such requirement will normally be made before any action on the merits; however, it may be made at any time before final action.

At this time since claims 17 and 18 are unclear and indefinite and 6no restriction requirement is needed.

The applicant argues that the Holbrook reference fails to meet the limitations of the claims because claim 1 was amended to recite "the driven pulley is pushed from an inside of the belt when the spring is in tension." The Holbrook reference shows in Figure 1 that the pulley is pushed from the inside of the belt when the spring is in tension, and therefore meets the limitations of claim 1.

The applicant's remarks have been accorded due consideration, however they are not deemed fully persuasive.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (571) 272-7106. The examiner can normally be reached on Monday-Friday (7:00a-3:30p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6217. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vicky A. Johnson 1/5/06
Primary Examiner
Art Unit 3682